

DOI: 10.5281/zenodo.8325292

THE ANTECEDENT FACTORS OF SUCCESS IN THE OPERATION OF INTERIOR DESIGN BUSINESS IN BANGKOK AND VICINITY

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Abstract

Rapid changes affecting the survival and success of business operations bring to systematically study of the causal factors, creativity, new product development, service innovation, environment and value of design affecting the operation of interior decoration business in Thailand. The research aimed (1to study level of creativity, new product development, service innovation, environment, and values that affect the operation success of an interior design business (2to study the influence of creativity, new product development, service innovation, environment, and values that affect the operation success of an interior design business. (3to develop the model of creativity, new product development, service innovation, environment, and values that affect the operation success of an interior design business in Bangkok and its vicinity. This research used an integrated research method between quantitative research and qualitative research. As for quantitative research, the sample group was 420 interior design business operators. The sample size was determined using a -20fold criterion of the observed variables using multistage sampling. The data was collected with questionnaires. Data was analyzed by structural equation modeling. Qualitative research used in-depth interview methods. The target audience was 20 executives and interior design business entrepreneurs. The findings revealed that 1) creativity, new product development, service innovation, environment, value and success of the interior design business were at a very high level. 2) creativity, new product development, service innovation, environment, and value affected the success of interior design business statistically significant at the .05 level. 3) model of the operation success of interior design business in Bangkok and vicinities developed by the researcher named 2RSMC Model) R = Research and Development R = Rule of Law, M = Money Value, S = Solve problems, C = Creativity, (In addition, the results of qualitative research also found that building the success of the interior design business in Bangkok and its vicinity, continuous research and development of new products, working with regard to environmental regulations, creating designs with quality that worth the money, employees can use their creativity in design work independently, solving problems and working that meets the customer's needs as much as possible. The results of this research can be adapted into strategies to create a competitive advantage with competitors in interior design effectively and create the success of the interior design business in Thailand to grow steadily and sustainably.

Keywords: Modeling / Interior Design / Creativity / Success in Business Operations.

INTRODUCTION

Current business operation in the beginning of the 21st century has had an impact on architecture and interior design around the world. It shows the changes of society and technology that spins even faster. It creates new challenges in the professional community modified from the original in the 19th century, which emphasized design skills in beauty as the main feature of interior decorators in the past. Taking into account the environment context, and utility or understanding the important architecture, structure and system work don't seem to be enough for today's interior designers. They must respond to new needs of society and changing contexts while using creativity and technology skills to promote the design has a





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clearer role (Office of the National Economic and Social Development Council, 2020).

As such, interior decorators or interior designers must respond to the challenges and changes in their profession. The definition of an interior decorator's profession is interior design in various areas, including designing interior products in building by adopting varied knowledge and ideas in art design, production and marketing. To complete the construction, the interior decorators or interior designers must operate by determining the details of components, laying out the blueprint, as well as supervising the works, for example, designing interior spaces in houses, buildings, show areas and various exhibitions, both government and private organizations. Normally, the interior designers must perform both internal and external works. Operation sometimes may be necessary to bring a computer program to be applied as a helper for the interior design of the building and location to be more convenient and easy. When comparing architects and interior designers, architects are those who are responsible for designing both exterior and interior construction of buildings that need to contemplate the design by considering the environment as well as the style of the building to be consistent with the direction of the sun, wind, rain, and weather, and emphasizing the maximum benefit to users. The innovations that occur are more important than the source (Yuan & Woodman, 2010), which can be seen from many studies focusing on of organizational creativity as a precondition for innovation (Bessant & Caffyn, 1997; Styhre & Sundgren, 2005).

The results of past studies have found that organizations with high levels of creativity outperform those at both low levels of individual and organizational creativity in innovation (Bharadway & Menon, 2000). Academicians in business administration have studied the concept of management innovation more because it can be applied to all types of organizations, both public and private sectors. Therefore, creativity has been used for product and service development, including the development of technology. It makes those organizations more efficient, able to innovate better than before and can develop sustainably (Drucker, 1985). The production of new products, however, must be accepted by consumers. It must make consumers realize the value because perceived value is an important factor that affects repeat purchases and service loyalty (Jiseon & Jokyung, 2019).

Perceiving value has many perspectives. Consumers' decision to buy shows consumers' caring about the different values of the product. This difference can affect the motivation to buy (Kerdpitak et al., 2023). Each consumer has different characteristics of attention to the received value. The basic principles of consumer value theory include consumer choices or having multiple values for consumption. Consumption values contribute to the difference in any alternative situation, and they are independent. Therefore, the perception of value inevitably affects the success of the business. There are also environmental factors that each country currently attaches great importance to. This is due to the changing pollution affecting the living conditions of the world's population, such as global warming arisen from human use of unbalanced natural resources and creation enormous amounts of waste in the world. If all parties and countries do not seriously cooperate to solve the problem, it will increase the pollution on earth. It may result in being unable to live on this planet, so the environment has become a factor that businesses must focus on. Businesses must adapt to create less pollution





DOI: 10.5281/zenodo.8325292

until it becomes a value that can be added to the products of businesses that can produce an environmentally friendly product (Ahn & Kwan, 2019).

The above information on rapid changes affecting survival and success of business, therefore, led to a systematic study of the causal factors of creativity, new product development, service innovation, environment and the value of design work that affect the operation of the interior decoration business in Thailand. The results of this study will lead to the creation of a conceptual model, which is a study model to be used as a guideline for solving problems in interior design business to be able to continue the business under the current economic and social crisis situation. It will support the formulation of strategies and policies that affect the success of the operation of the interior design business. Consequently, the researchers are interested in studying the antecedents of success in the operation of interior design business in Bangkok and its vicinity to be a guideline for product development and service innovation in the organization. It will lead to a sustainable competitive advantage as well as information for future research studies related to creativity in other dimensions and contexts.

LITERATURE REVIEW

Success in Business Operation

Every business has a set of goals in running business successfully. Such goals are returns from business operations. The returns are both in the form of monetary and non-monetary. Most monetary returns consist of profits, sales, property values of the business, and higher stock prices of businesses. While, most of the non-monetary consist of image, reputation, leadership, acceptance from customers or society, etc. Many researchers have defined the word "success" in many ways. The success of the business organization is considered from business growth or business profits (Kerdpitak, 2022; Kim, Lee& Yoo, 2006). It is also measured by comparing performance against specified goals or considering from job satisfaction, success in product invention, new product launch, growth or sustainability. Organizations should also consider their personnel aspects, apart from their profits. The personnel of the organization must have a passion for the organization, work efficiently and think creatively to make the business successful. The success should be considered both quantitatively and qualitatively. Quantitative success is measured by profit margins, sales, asset value, dividends, market shares and new products, whereas qualitative success is the image of the organization (Kerdpitak, 2023a; Kim, Lee& Yoo, 2006).

Therefore, the success in this research refers to the measurement of business performance, based on profits, sales and assets of the business. It is a comparison of the performance with the goals set in a certain period of time to let the organizations know the status of the business and adjust the strategy and management methods to suit the changing situation. If a business has profits and performance according to the goals in each period continuously, the image of the organization is accepted by consumers.





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Perceived Value

Value concept starts from the concept of economics. The first period focuses on the study of the value of spending money "get more, pay less" based on the concept of monetary value (Thaler, 1985), classified as a quantitative dimension concept. Later, Zeithaml (1988) was interested in studying the qualitative dimension and there are many other researches that reinforce the qualitative concept or non-financial value. Consistently, Kotler and Keller (2009) defines the meaning of perceived value as value means the difference between the value that customers receive from owning and the use of the product or service compared to all associated costs in total ownership of the product. Customers will buy products from organizations that offer the highest value they can perceive. Customer perceived value (CPV) or the value that the customer receives means the value that arises from the difference between total customer value and total cost. Total customer value is the value that is the overall benefit that the customer expects from the use of that product and service. It is economic, functional, and psychological values. Total customer cost refers to the cost that customers expect to pay in order to obtain that product and service. It is the cost of seeking information for assessing cost of acquisition of goods, cost of using the product as well as the disposal of the remains of the product. Value is the ratio or trade-off between quality and the concept of value for money. The definition of value is described as the overall assessment of the customer's value for money (Kerdpitak, 2023; Kim, Lee& Yoo, 2006). However, perception arises from receiving a response as a result of an opinion-related touch by the five senses, consisting of the ears, eyes, nose, tongue, and body. In addition, the sixth sense is thought. When combined it with touch, it will become a perception and is processed to interpret what is perceived by the sense of touch. The effect is dependent on the need (Kumar, Dash, & Purwar, 2013; Kerdpitak, 2023b). Consumer value can reduce uncertainty and create trust to carry out a long-term relationship with a company (Kim, Lee & Yoo, 2006). Therefore, value in this research refers to the value the customer receives from owning or touching by comparing with customer total cost, both financial and non-financial costs since the service value model consists of 5 aspects: functional value, social value, emotional value, epistemic value, and conditional value.

Creativity

A person must have a creative process to generate creativity. Wallach (1962) defines a creative process in 4 stages:

- 1) Preparation stage is the stage of preparing various information on actions, the right approach, problems or fact, etc.
- 2) Incubation stage is the stage in which information, both new and old, is in chaos so the thoughts are left in silence.
- 3) Illumination stage is the stage in which confused thoughts are arranged and linked to create clarity and clearly visualized ideas.
- 4) Verification stage is the stage of bringing 3 steps before to prove that the idea is true and correct.





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Incidentally, the Office of the Civil Service Commission (2016) has mentioned that creativity is multi-directional thinking. It is the ability of human to lead to new things and produce new products, including the ability to invent new things and find solutions to problems. It is also the collection of various knowledge and new things that are emerging in the form of artistic, literary, scientific products, or just a process or a method. Discovery of new things by adapting, embellishing, combining, including the invention of principle and theory, produces products that are beneficial to society. In addition, creativity also includes the components of operating decision making in business, being aware of new rules, and learning new things/ideas/changes. When an entrepreneur has an understanding, it will affect the success of the business organization (Nualkaw et al., 2021).

Therefore, creativity in this research means the idea of creating something new. This new things can be goods and services or management methods to benefit business, society, economy and environment.

New Product Development

The manufacturing businesses face the environment or situation that has changed from the original. This may result in changing consumer tastes or different generations of consumers with different needs. As a result, the businesses must develop new products by improving the original product to have better quality (Department of Industrial Promotion, 2020) or improve products to meet the needs of consumers. The form of development may be in terms of packaging or the product itself. Product development is a powerful tool. It relies on both systems and strategies to produce commercial products (Department of Industrial Promotion, 2020; Kerdpitak, 2023a).

The businesses must adjust the process of transforming new product concepts into products presented to the consumer market to generate sales for the company in a short period of time (Krishnan and Ulrich, 2001; Darawong, 2019). The businesses must have new products with features that can be tangible by the senses, such as products, places, music, smells or taste. They must have intangible products, including providing services that can fully meet the needs of consumers and also provide an opportunity for the organization to expand its business continuously (Cooper, 2016; Darawong, 2019; Hiranrithikorn, 2023).

Therefore, the new product development in this research refers to a process or method for improving, changing or modifying both tangible and intangible products to get new products that meet the needs of customers. As a result, the business has continued to expand.

Service Innovation

In all types of business operations, services are involved. There are both services within the organization and services outside the organization. Both types of services are important. Inhouse service will help the business run smoothly and achieve its goals. The services outside the organization are related to partners, consumers or stakeholders in business operations, including the environment. The service to the outside organization will be able to meet the needs between each other well and have a good understanding of each other. It is a factor that





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contributes to business success. Due to the importance of services, various organizations are trying to improve the services all the time. The goal is to create satisfaction for both internal and external customers of the organization. Such service development will be called as innovative services because new ideas or technologies and new operational strategies through systematic thinking and understanding the needs of service users was used as a guideline to create different services (Songsoonthornwong, 2016; Kortana, et al., 2023). Creating new work styles help increase customer satisfaction and make the organization benefits. There are 3 forms of service innovation: innovation in services, innovation in process and innovation in service business, organization or industrial unit (Ruenjit and Boonmeesrisanga, 2017; Kerdpitak et al., 2023b). The result of service innovation is to meet the needs and create satisfaction for customers. It also raises the efficiency level of services and creates added value for the business.

Therefore, the service innovation in this research is a new service model that is valuable, different, and beneficial. It meets the diverse needs of customers, leading to service efficiency and satisfaction beyond expectations for customers. The services are developed to suit the service recipients. Such development can be one or more aspects of the way the service is provided, communication method, tools or equipment, service technology and solving business problems,

In this regard, Songsunthornwong (2016) discuss that service innovation is the use of innovation to develop the form and process of providing services in the business sector in order to get services that meet customer needs by emphasizing convenience and speed of services. Its benefit is to differentiate the services for customer satisfaction.

The process of integrating different knowledge based on these forms of innovations cannot depict the finalized product and achieved methods. Therefore, innovation management is required by turning uncertainty into knowledge using committing resources. Innovation occurrence requires a lot of knowledge from many sources and a variety of formats, both in terms of technology and marketing. Successful innovation management needs knowledge management to create innovation at the component level and thinking about how to combine them to achieve changes at the architecture level (Kerdpitak et al., 2023b).

However, the heart of the service is the work process of the organization which is what the customer pays for his consumption. In order to improve production efficiency and reduce business costs, it is necessary to rely on knowledge of process innovation to help develop production processes. Innovation in service system is considered an important tool that creates added value to a business and increases the chances of success for the business. Under the trend of more intense price competition, selecting innovations must be based on the possibility of application. There must be a way to practice that is not too difficult. Moreover, such innovations should be considered in accordance with the status of the business in terms of the readiness of funds and personnel, plus business goals set in the future (Kerdpitak et al., 2022).

Commercially developed service innovation is a new service in the market or the existing service with the value added. It can meet various needs and make businesses reduce costs as





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well as marketing and distribution expenses. Customer perceived value creates their confidences to buy products and use services. Besides, differentiating the product from competitors gets customer attention and recognition. It will help generate sales quickly and have a huge profits, including gaining more market share. Understanding customer needs is important because it will support the development of products and services to maximize the benefits for customers. The brand helps customers to be aware of products or services that have been designed to win the hearts of customers who are the organization's target group forever. However, delivering service innovations that are easy to understand through concise and fast work processes to customers is considered the heart of the service. What has been said is a combination of business model innovation, which is an innovation that originates from customers or demand innovation to deliver services to the most satisfied customers. Service innovation is becoming increasingly important because the service is more meticulous every day. Service is not only providing services and receiving money, but there are many entrepreneurs of the same type of service today, causing entrepreneurs cannot use the traditional service methods. They must have knowledge about their service or business very well (Kerdpitak et al., 2022).

Environment

The economy growth affects the environment. The impact must be taken into account in three aspects: size, composition and technique because the world in all sectors, both private and public sectors, uses natural resources imbalanced. This causes an imbalance of environmental conditions. This imbalance has resulted in environmental pollution, for example, creating an increase in hot air masses, and is a major cause of global warming, which intensifies and increases respectively. Nowadays, various human activities cause greenhouse gases, resulting in global warming, changing environmental conditions, and living conditions of the world population. Albert Einstein said that the truth is the system that takes us into won't take us out. This could be translated as living conditions, including various productions that cause changes in the atmosphere and global warming. The system will not be able to fix the problem, if humans do not find a way to solve that problem. The search for solutions to problems requires cooperation from government, business and public sectors (Jie & Xian-jin, 2011; Kerdpitak et al., 2023a).

Therefore, the environment will become a factor that every organization in business, government, and public sectors must pay more attention by giving importance to management that can reduce environmental problems (Nualkaw et al., 2021). If any organization contributes to reducing environmental problems, for example, environment-friendly business operation, it will increase the value of the products and services of that business and receive higher acceptance from buyers. At the same time, there has been a trend of rejection of organizations that create or increase the severity of environmental problems. In addition, a good governance system has been established, both internal and external governance systems, to create value and acceptance from all sectors: business, government, public sectors. All stakeholders for the business sector, moreover, found that good governance has become an important factor for sustainable business growth. Thus, various organizations use it as a strategy in management to





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support creativity, use of resources worthwhile, and environmental conservation (Sundar & Anil, 2000; Nualkaw et al., 2021).

This research is about the interior design business involved in the use of wood which is associated with environmental problems. For example, Taylor (2016) states that the use of resources such as forests and fossil energy sources will increase due to the trend of population growth, causing climate change. The environment in this research is general conditions such as air, smell, sound that have changed which are caused by business operations. As a result of such changes, the living conditions of the world's population and natural resources have rehabilitated. The rate of change has gradually increased. The study of factors that will reduce the impact of business operations on environmental conditions, therefore, is necessary to take into account.

METHODOLOGY

This study was a mixed methods research, with embedded design (Cresswell, 2014), to get the highlight of both quantitative and qualitative methods to better support the quality of the research (Johnson & Turner, 2003). The quantitative sample was 420 interior design businesses. The study started from quantitative research by reviewing the literature and related research on the variables of success in the operation of interior design business consisting of creativity, new product development, service innovation, environment and perceived value. The data was synthesized and summarized into definition of terms. The indicators of variables according to the research concept were determined. The questionnaire was then constructed according to the 5-level Likert's scale (Likert, 1932), with the validity and reliability tests before collecting data and then statistically analyzing data by using structural equation modeling (SEM).

For qualitative research, the researchers concocted in-depth interviews from 10 Thai bag export interior design entrepreneurs and 10 interior design experts, a total of 20 people arisen from snowball sampling. The qualitative data was complied, categorized, analyzed, interpreted and linked to draw conclusions on the results of the quantitative analysis with more depth, detailed, rational explanation.

This chapter presented research methods according to the following issues: (1) Guidelines Quantitative research consisting of (1.1), population and sample, (1.2) sample size, (1.3) random sampling, (1.4) research tools, (1.5) quality of tools, (1.6) data collection, (1.7) data analysis, and (2) qualitative research approaches, consisting of (2.1) population and sample, (2.2) sample selection, (2.3) research tools, (2.4) data collection, (2.5) data verification, and (2.6) data analysis.

RESULTS

This study used the analysis of exploratory data to test the relationship between the variables by examining the normal distributions of the 15 observed variables studied in the structural equation model, using the chi-square test (χ^2). If it was found to be statistically significant at the .05 level, it means that such variables were non-normally distributed. On the other hand, if





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it was found to be not statistically significant (P-value > .50), it means that such variables were normally distributed.

Table 1: Statistical Test of Empirical Variables (n=420)

Variables	M	S.D.	%CV	Sk	Ku	χ^2	P-value
STRA	3.66	.98	26.78	-3.783	-3.973	3.097	.000
KNOW	3.73	.94	25.20	-4.260	-4.057	34.608	.000
INDEP	3.41	1.08	31.67	-2.697	-4.536	27.854	.000
CULT	3.72	.94	25.27	-4.270	-3.644	31.510	.000
EXPER	3.30	1.07	32.42	-2.217	-3.922	2.297	.000
RESO	3.45	1.04	30.14	-2.878	-4.151	25.512	.000
INFOR	3.70	.95	25.68	-4.159	-3.901	32.516	.000
RADE	3.51	1.01	28.77	-2.994	-4.129	26.013	.000
TECH	3.50	.99	28.29	-2.858	-4.110	25.057	.000
COMU	3.21	1.08	33.64	-1.862	-3.665	16.897	.000
TIME	3.32	1.13	34.04	-2.598	-4.898	3.743	.000
SLOV	3.50	1.04	29.71	-3.193	-4.397	29.525	.000
RULE	3.57	1.04	29.13	-3.708	-4.443	33.485	.000
PROC	3.58	1.05	29.33	-3.839	-4.399	34.084	.000
CSR	3.57	1.02	28.57	-3.440	-4.119	28.801	.000
EMOT	3.63	.96	26.45	-3.550	-3.898	27.793	.000
FUNC	3.56	1.00	28.09	-3.386	-4.228	29.334	.000
MONE	3.57	1.02	28.57	-3.504	-4.260	3.425	.000
PROF	3.55	1.02	28.73	-3.332	-4.318	29.745	.000
SALE	3.52	1.00	28.41	-3.080	-3.786	23.824	.000
SATI	3.66	.96	26.23	-3.783	-4.029	3.549	.000

Note: chi-square (χ^2) with statistical significance (P-value <.05) indicates a non-normal distribution.

The results of normal score examination by chi-square (χ^2), as shown in TABLE 1, found that all empirical variables studied in the SEM were statistically significant (p > .05), indicating that such empirical variable had a non-normal distribution. When considering the concept of Kelloway (1998) which proposed that a large sample size ($n \ge 400$) could be statistically relegated that the data measured with the scale questionnaire have a normal curved distribution, according to The Central Limit Theorem (Kelloway, 1998).

Such results may cause the problem in an empirical model fit assessment by of the chi-square test (χ^2). The researchers therefore solved by finding the relative chi-square (χ^2 /degree of freedom). If the value was less than 5.00, it indicated that the model was empirically fit, although the model χ^2 test was statistically significant (p-value < .05) (Hair, et al., 2009).





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Table 2: Factor Loadings (n = 420)

Creativity (CREA) Strategy (STRA) Knowledge (KNOW) Independence (INDEP) Organizational culture (CULT) New product development (NPD) Staff experience (EXPER) Organizational resources (RESO) Information (INFOR) Research and development (RADE) Service innovation (SERIN) Technology (TECH)	.75 .79	.44	16.06					
Knowledge (KNOW) Independence (INDEP) Organizational culture (CULT) New product development (NPD) Staff experience (EXPER) Organizational resources (RESO) Information (INFOR) Research and development (RADE) Service innovation (SERIN)		.44	1606					
Independence (INDEP) Organizational culture (CULT) New product development (NPD) Staff experience (EXPER) Organizational resources (RESO) Information (INFOR) Research and development (RADE) Service innovation (SERIN)	.79		16.06	.56				
Organizational culture (CULT) New product development (NPD) Staff experience (EXPER) Organizational resources (RESO) Information (INFOR) Research and development (RADE) Service innovation (SERIN)		.37	17.52	.63				
New product development (NPD) Staff experience (EXPER) Organizational resources (RESO) Information (INFOR) Research and development (RADE) Service innovation (SERIN)	.71	.50	14.78	.50				
Staff experience (EXPER) Organizational resources (RESO) Information (INFOR) Research and development (RADE) Service innovation (SERIN)	.77	.41	16.98	.59				
Organizational resources (RESO) Information (INFOR) Research and development (RADE) Service innovation (SERIN)								
Information (INFOR) Research and development (RADE) Service innovation (SERIN)	.86	.26	21.38	.74				
Research and development (RADE) Service innovation (SERIN)	.90	.20	22.74	.80				
Service innovation (SERIN)	.74	.45	17.21	.55				
` '	.82	.33	19.81	.67				
Technology (TECH)								
	.86	.26	21.48	.74				
Communication (COMU)	.83	.31	20.30	.69				
Time (TIME)	.84	.30	20.56	.70				
Problem solving (SLOV)	.87	.24	21.89	.76				
Environment (ENV)								
Rules (RULE)	.90	.19	23.33	.81				
Manufacturing process (PROC)	.95	.09	25.68	.91				
Corporate social responsibility (CSR)	.88	.22	22.66	.78				
Perceived value (PERV)								
Emotional value (EMOT)	.87	.24	22.25	.76				
Functional value (FUNC)	.96	.08	26.13	92				
Monetary value (MONE)	.93	.14	24.75	.86				
Organizational success (SUC)								
Profits (PROF)	.87	.24	22.11	.76				
Sales (SALE)	.92	.16	23.85	.84				
Satisfaction (SATI)	.90	.20	22.99	.80				
$\rho_{c} = .92 \ \rho_{v} = .80$								
Chi-Square=0.00, df=0, P-value=1.00000, RMSI				j				

Table 3: Measurement Model (n=420)

			Independent variables					
Dependent variables	R2	Effects	New product development (NPD)	Service Innovation (SERIN)	Environment (ENV)	Perceived value (PERV)	Creativity (CREA)	
New product		DE	-	-	-	-	.89*(17.42)	
development	.79	IE	=	-	=	=	-	
(NPD)		TE	=	-	=	=	.89*(17.42)	
Service	DE	.88*(10.32)	-	=	=	.47*(6.86)		
innovation	.89	IE	=	-	=	=	.38*(9.69)	
(SERIN)		TE	.88*(10.32)	-	=	=	.85*(17.90)	
Environment (ENV)	.86	DE	.36*(2.79)	.52*(5.06)	=	=	.67*(6.90)	
		IE	.46*(4.84)	-	-	-	.26*(9.99)	
		TE	.82*(8.84)	.52*(5.06)	-	-	.93*(18.29)	
Perceived	.89	DE	.46*(4.44)	.37*(3.98)	.70*(9.32)	-	.45*(6.87)	
value (PERV)		IE	.30*(7.31)	.36*(4.76)	=	-	.35*(11.31)	



ISSN 1533-9211

DOI: 10.5281/zenodo.8325292

		TE	.76*(7.71)	.73*(6.43)	.70*(9.32)	-	.80*(17.32)
Organizational success (SUC)	.84	DE	.36*(4.58)	.30*(3.27)	.54*(5.99)	.37*(4.55)	.44*(6.81)
		ΙE	.48*(7.71)	.55*(5.98)	.26*(4.49)	-	.37*(12.74)
		TE	.84*(7.92)	.85*(6.91)	.80*(10.06)	.37*(4.55)	.81*(16.96)
χ 2= 297.68 df = 157 p-value = .00000, χ 2 / df = 1.89, RMSEA = .046, RMR = .024, SRMR = .023, CFI =							
1.00, GFI = .94, AGFI = .91, CN = 279.48							

^{*}statistical significance at the .05 level

Note: In parentheses, they were the t-value. If the value was not between -1.96 and 1.96, it was statistically significant at the .05 level.

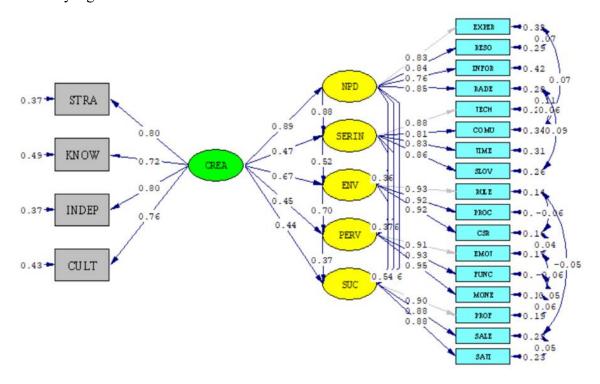


Figure 1: Adjusted Model (n=420)

The analysis results of the model based on hypotheses by allowing the variance of the standard error (θ) of 17 pairs of empirical variables to be correlated (df before adjustment = 174 and df after adjustment = 157) revealed that the adjusted model was fit to the empirical data when considering the fit Indexes as follows: $\chi^2 = 297.68$ df = 157 p-value = .00000, χ^2 / df = 1.89, RMSEA = .046, RMR = .024, SRMR = .023, CFI = 1.00, GFI = .94, AGFI = .91, CN = 279.48.

The fit indexes of the adjust model, χ^2 = 297.68 df = 157 p-value = .00000, did not meet the criteria because it was still statistically significant (P-Value < .05). However, chi-square test (χ^2) was sensitive to the sample size. The researchers therefore also considered (χ^2) / df value = 1.89, which was considered to pass the criteria because it was less than 2.00, RMSEA = .046, which was considered to pass the criteria because it was less than .05, RMR = .024, SRMR = .023, which were considered to pass the criteria because it is less than .05, CFI = 1.00, GFI





DOI: 10.5281/zenodo.8325292

= .94, AGFI = .91, which was considered to pass the criteria because it was greater than .90, and CN = 279.48, which was considered to pass the criteria because it was greater than 200.00. So, it concluded that the adjust model was fit to the empirical data and the parameter estimation in such a model was acceptable.

CONCLUSION

The results of the research concluded that the equation model of creativity, new product development, service innovation, environment, and perceived value that affects the success of the interior design business operations found the estimation in the structural equation model as follows:

- 1) New product development (NPD) has a direct effect on organizational success (SUC), with the effect coefficient of .36 and statistical significance at the .05 level.
- 2) Service innovation (SERIN) has a direct effect on organizational success (SUC), with the effect coefficient of .30 and statistical significance at the .05 level.
- 3) Environment (ENV) has a direct effect on organizational success (SUC), with the effect coefficient of .54 and statistical significance at the .05 level.
- 4) Perceived Value (PERV) has a direct effect on organizational success (SUC), with the effect coefficient of .37 and statistical significance at the .05 level.
- 5) Creativity (CREA) has a direct effect on organizational success (SUC), with the effect coefficient of .44 and statistical significance at the .05 level.
- 6) New product development (NPD) has a direct effect on perceived value (PERV), with the effect coefficient of .46 and statistical significance at the .05 level.
- 7) Service innovation (SERIN) has a direct effect on perceived value (PERV), with the effect coefficient of .37 and statistical significance at the .05 level.
- 8) Environment (ENV) has a direct effect on perceived value (PERV), with the effect coefficient of .70 and statistical significance at the .05 level.
- 9) Creativity (CREA) has a direct effect on perceived value (PERV), with the effect coefficient of .45 and statistical significance at the .05 level.
- 10) New product development (NPD) has a direct effect on environment (ENV), with the effect coefficient of .36 and statistical significance at the .05 level.
- 11) Service innovation (SERIN) has a direct effect on environment (ENV), with the effect coefficient of .52 and statistical significance at the .05 level.
- 12) Creativity (CREA) has a direct effect on environment (ENV), with the effect coefficient of .67 and statistical significance at the .05 level.
- 13) New product development (NPD) has a direct effect on service innovation (SERIN) with the effect coefficient of .88 and statistical significance at the .05 level.





DOI: 10.5281/zenodo.8325292

- 14) Creativity (CREA) has a direct effect on service innovation (SERIN), with the effect coefficient of .47 and statistical significance at the .05 level.
- 15) Creativity (CREA) has a direct effect on new product development (NPD), with the effect coefficient of .89 and statistical significance at the .05 level.
- 16) New product development (NPD), service innovation (SERIN), environment (ENV), perceived value (PERV), creativity (CREA) can jointly predict organizational success (SUC) by 84%.
- 17) New product development (NPD), service innovation (SERIN), environment (ENV) and creativity (CREA) can jointly predict perceived value (PERV) by 89%.
- 18) New product development (NPD), service innovation (SERIN) and creativity (CREA) can predict the environment (ENV) by 86%.
- 19) New product development (NPD) and creativity (CREA) can jointly predict service innovation (SERIN) by 89%.
- 20) Creativity (CREA) can predict new product development (NPD) by 79%.

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